



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,472	02/26/2004	Takahiro Ichihara	925-284	9312
23117	7590	11/22/2005	EXAMINER	
NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203			BONCK, RODNEY H	
			ART UNIT	PAPER NUMBER
			3681	
DATE MAILED: 11/22/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/786,472	ICHIHARA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Rodney H. Bonck	3681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 05 October 2005.  
 2a) This action is **FINAL**.                  2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-11 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-11 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date. _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

The following action is in response to the amendment received October 5, 2005.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 ends with the word "wherein", implying that additional limitations follow. Thus it appears that a portion of the claim has been omitted, and the intended scope of the claim is unclear.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, and 4 are rejected under 35 U.S.C. 102(a and e) as being anticipated by Ueda et al.(US 2003/0194263 A1). The Ueda et al. device discloses a one-way clutch unit comprising a first one-way clutch 17 (see Figs. 1 and 2) having a first outer ring with raceway and engagement surfaces and a first inner ring contacting portion 19 of the rotating shaft and having raceway and engagement surfaces. The one-way clutch unit further includes a second one-way clutch 18 having a second outer ring with raceway and engagement surfaces and a second inner ring with raceway and engagement surfaces. An annular recess is provided in an inner periphery of the first inner ring of the first one-way clutch. An end portion on the side of the raceway surfaces of the second one-way clutch is disposed in the annular recess, as seen in Figs. 1 and 2 of Ueda et al.

Claims 1, 2, 4, and 5 are rejected under 35 U.S.C. 102(a and e) as being anticipated by Hayashi et al.(US 2003/0103848 A1). The Hayashi et al. device discloses a one-way clutch unit comprising a first one-way clutch 85 having a first outer ring with raceway and engagement surfaces and a first inner ring contacting shaft portion 86B and having raceway and engagement surfaces. The one-way clutch unit further includes a second one-way clutch 66 having a second outer ring with raceway and engagement surfaces and a second inner ring with raceway and engagement surfaces. An annular recess is provided in an inner periphery of the first inner ring of

the first one-way clutch. The second one-way clutch is disposed in the annular recess. In Hayashi et al. the outer ring has engagement cam surfaces.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ueda et al.(US 2003/0194263 A1) in view of Fujiwara(US 2002/0183147 A1). This claim requires that the inner ring of the first one-way clutch have an engagement cam surface. It is not clear from Ueda et al. which ring carries the engagement cam surface. Fujiwara discloses a one-way clutch that has the engagement cam surface on the inner ring (see

Art Unit: 3681

Fig. 5). This is a well-known arrangement, and it would have been obvious to one having ordinary skill in this art to provide the engagement cam surface on the inner ring of the one-way clutches of Ueda et al.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ueda et al.(US 2003/0194263 A1) in view of Hayashi et al.(US 2003/0103848 A1). This claim requires that the outer ring of the second one-way clutch have an engagement cam surface. It is not clear from Ueda et al. which ring carries the engagement cam surface. The Hayashi et al. device discloses a one-way clutch that has the engagement cam surface on the outer ring (see Figs. 5A and 5B). This is a well-known arrangement, and it would have been obvious to one having ordinary skill in this art to provide the engagement cam surface on the outer ring of the one-way clutches of Ueda et al.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ueda et al.(US 2003/0194263 A1) in view of Imasaka et al.(US 2004/0026201 A1). This claim requires that the recess and the surface received in the recess be curved surfaces. For providing axial compactness, Imasaka et al. provide a recess 43 in gear 16 for receiving hub 5h. Imasaka et al. teach curving the surface to avoid stress concentration. In view of this teaching of Imasaka et al., it would have been obvious to provide curves surfaces in Ueda et al., the motivation being to reduce axial length and to avoid stress concentrations.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi et al.(US 2003/0103848 A1) in view of Fujiwara(US 2002/0183147 A1). This claim requires that the inner ring of the first one-way clutch have an engagement cam surface. In Hayashi et al. the outer ring has the engagement cam surfaces. Fujiwara discloses a one-way clutch that has the engagement cam surface on the inner ring (see Fig. 5). This is a well-known arrangement, and it would have been obvious to one having ordinary skill in this art to provide the engagement cam surface on the inner ring of the one-way clutches of Hayashi et al.

Claims 6, 7-9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi et al.(US 2003/0103848 A1) in view of Imasaka et al.(US 2004/0026201 A1). These claims require that the recess and the surface received in the recess be curved surfaces. For providing axial compactness, Imasaka et al. provide a recess 43 in gear 16 for receiving hub 5h. Imasaka et al. teach curving the surface to avoid stress concentration. In view of this teaching of Imasaka et al., it would have been obvious to provide curves surfaces in Hayashi et al., the motivation being to reduce axial length and to avoid stress concentrations.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi et al.(US 2003/0103848 A1) in view of Imasaka et al.(US 2004/0026201 A1) as applied to claims 6, 7-9, and 11 above, and further in view of Fujiwara(US 2002/0183147 A1). This claim requires that the inner ring of the first one-way clutch have an engagement

Art Unit: 3681

cam surface. In Hayashi et al. the outer ring has the engagement cam surfaces. Fujiwara discloses a one-way clutch that has the engagement cam surface on the inner ring (see Fig. 5). This is a well-known arrangement, and it would have been obvious to one having ordinary skill in this art to provide the engagement cam surface on the inner ring of the one-way clutches of Hayashi et al.

Applicant cannot rely upon the foreign priority papers to overcome the above rejections based in Ueda et al. because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

#### ***Response to Arguments***

Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

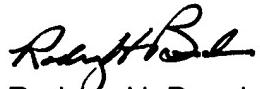
Art Unit: 3681

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney H. Bonck whose telephone number is (571) 272-7089. The examiner can normally be reached on Monday-Friday 7:00AM - 3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on (571) 272-7095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Rodney H. Bonck  
Primary Examiner  
Art Unit 3681

rhb  
November 19, 2005